

February 29, 2016

**Global Institute for the Study of the Intelligent Community in Dublin, Ohio, USA**



# Welcome to the Global Institute's Work Session!

# Welcome & Overview

## Welcome

Dana McDaniel, Dublin City Manager

## Top 7 Intelligent Communities

Lou Zacharilla, Founder, Intelligent Communities Forum

## Intelligent Ohio - Mission

Dave Baldwin, President, Aquarian Technology Systems

## Today's Objectives & Expectations



# Today's Agenda

1. Welcome
2. Website Overview
3. Connect Ohio Presentation
4. What's an Intelligent Ohio/Defining Success
5. Lunch Break
6. Steps in achieving our Mission
7. Role of the Institute
8. Role of our Members
9. Closing Comments



# Institute's Website Overview

<http://globalinstitute.dublinohiousa.gov/>

- 1. What documents would be useful to your organization?**
- 2. What documents can you contribute for the good of the group?**

Bruce Edwards, Dublin Web Administrator

[bedwards@dublin.oh.us](mailto:bedwards@dublin.oh.us)

Kyle Kridler, Dublin Economic Development Administrator

[kkridler@dublin.oh.us](mailto:kkridler@dublin.oh.us)



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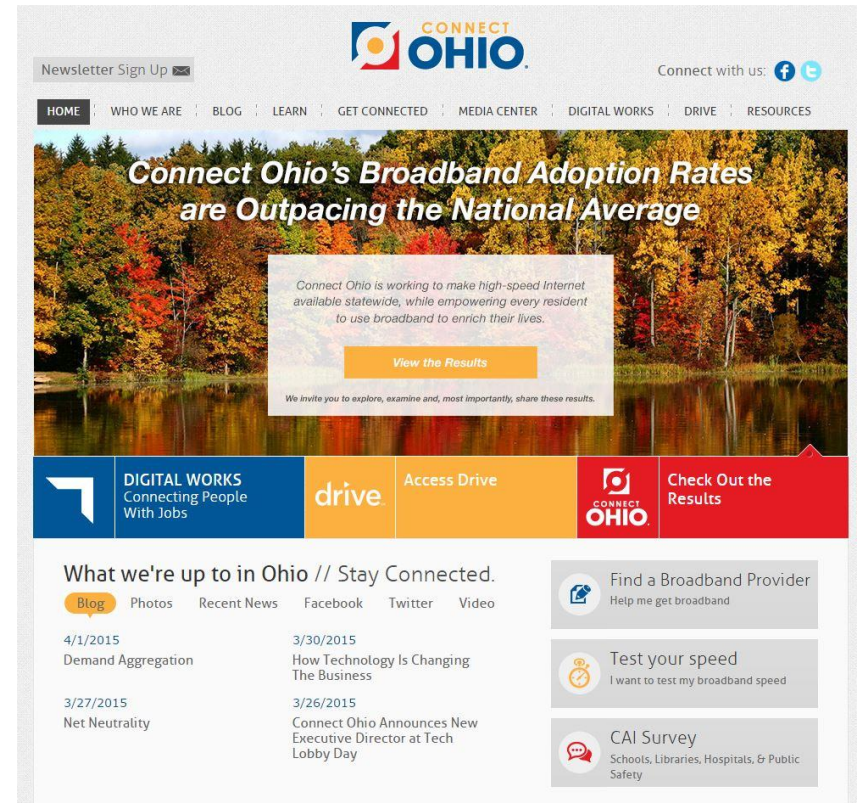
# Break

LINDSAY SHANAHAN  
EXECUTIVE DIRECTOR  
**CONNECT OHIO**  
FEBRUARY 29, 2016



# Connect Ohio

- Eight years as Ohio's nonprofit, neutral source for complete and accurate broadband data
- Advocating to connect communities and expand broadband access, adoption, and use statewide
- Key services:
  - ❖ Broadband Mapping, Research, and Visualization
  - ❖ Community Planning and Technical Assistance
  - ❖ State and Federal Broadband Policy Monitoring and Analysis



# Broadband Mapping, Research, and Technical Assistance

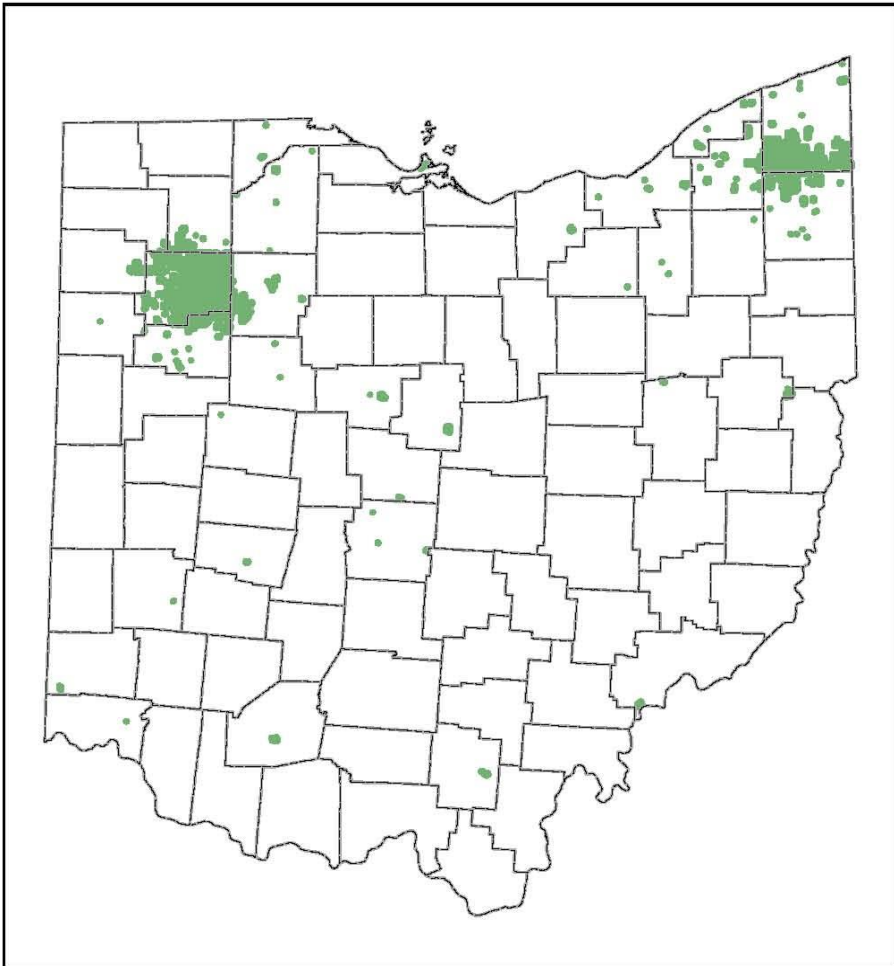
- Wireless & wireline broadband data collection, processing, mapping, and validation
- Publicly-available interactive mapping tool, My ConnectView™
- Peer-reviewed research and technology studies to measure the rates and related barriers to broadband adoption in Ohio
- Infrastructure and local asset evaluations
- Local broadband planning teams and community projects



# Direct Engagement Results in Accurate Broadband Maps

Relying on FCC data alone for this provider would overestimate availability of 25 Mbps download/3 Mbps upload broadband to 13,000 Ohioans.

Broadband Provider Filing to FCC (March 2015)



Connect Ohio Validated Coverage (June 2015)



Connect Ohio worked with the broadband provider to establish an accurate and rational coverage estimate.

# Broadband Availability Data

## Key Features

- Search by location
- Locate Providers
- Display Coverage
- Extract Demographics
- View Served/Unserved Areas
- Export Shape Files
- Share Links
- Display CAIs
- Display Tower Locations
- Customizable Maps



# Answers we can provide . . .

- Where is broadband available in Ohio?
- How many people do not have adequate access to broadband, and where are they?
- Are there differences between claimed broadband availability and actual connectivity?
- How are Ohioans using broadband?
- Are there different “use” profiles for broadband based on demographic profile?

**I just wanted to say thank you for taking the time to join our meeting with the libraries yesterday. I think it made a true difference for them to not only become more knowledgeable about some of the programs out there, but also to know that there are people in their corner trying to find better ways for the children in our region to use their libraries as the resources they need.**

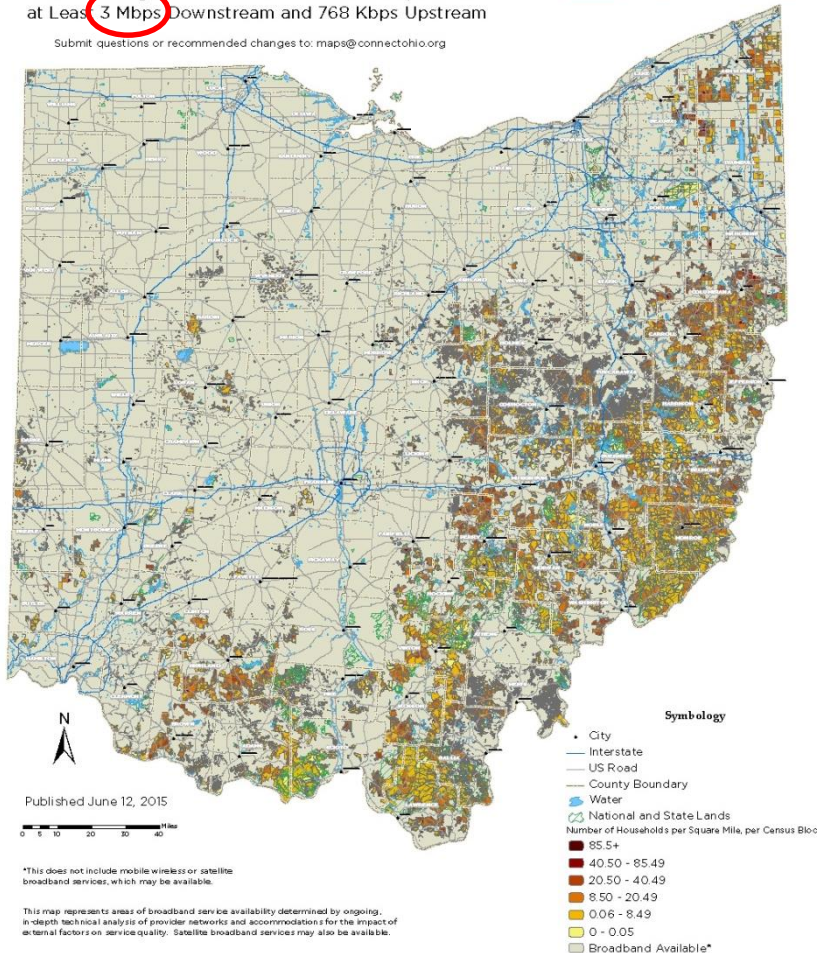
-Megan Wanczyk, VP of Annual Fund and Communications, Foundation for Appalachian Ohio

# Ohio's Broadband Landscape: Access

## Density of Households Unserved by a Broadband Provider by Census Block

Areas Lacking Broadband with Advertised Speeds of at Least **3 Mbps** Downstream and 768 Kbps Upstream

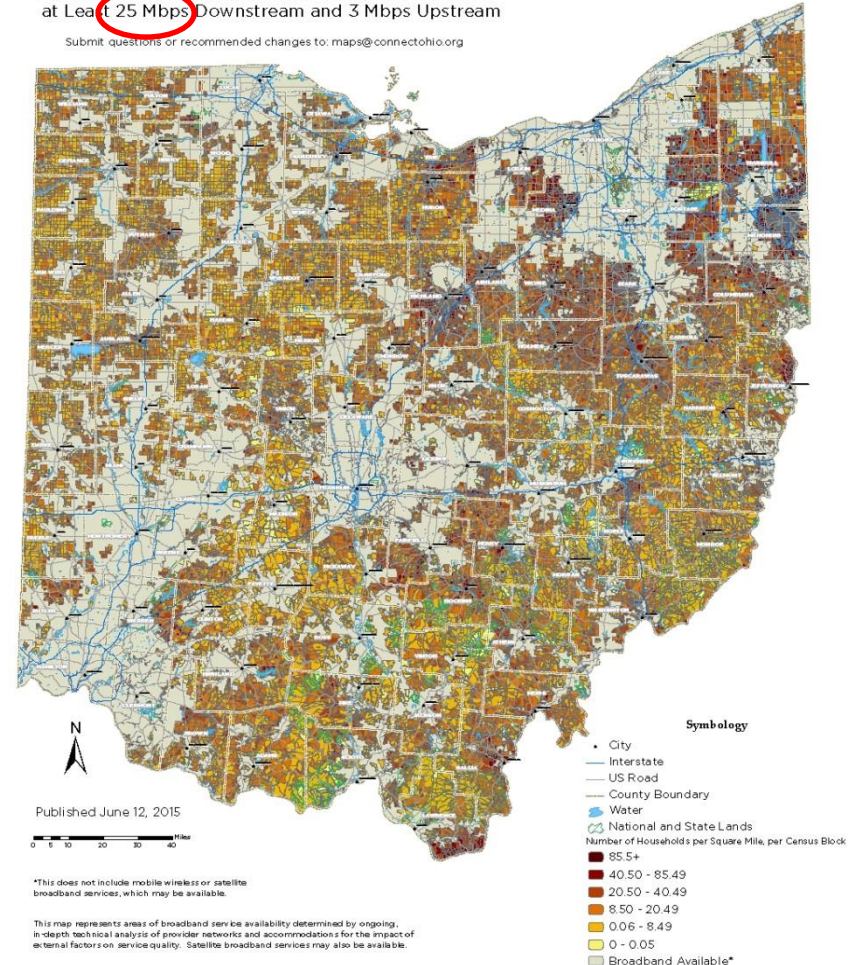
Submit questions or recommended changes to: [maps@connectohio.org](mailto:maps@connectohio.org)



## Density of Households Unserved by a Broadband Provider by Census Block

Areas Lacking Broadband with Advertised Speeds of at Least **25 Mbps** Downstream and 3 Mbps Upstream

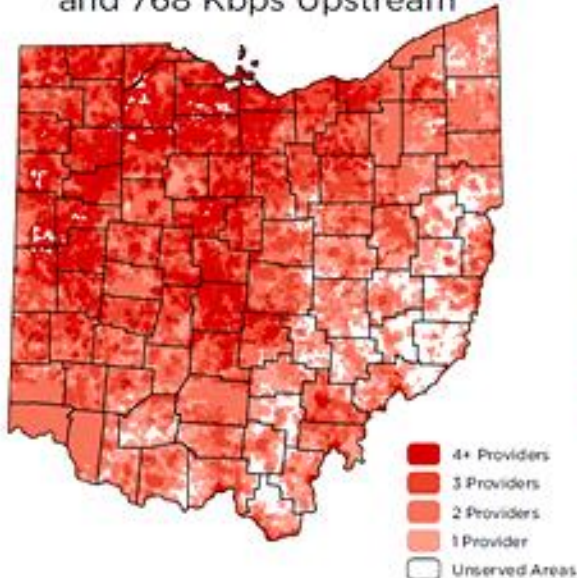
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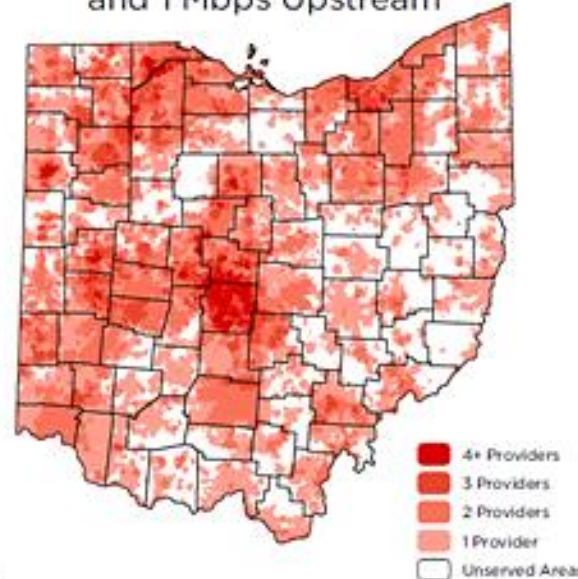
# Ohio's Broadband Landscape: Access

## Fixed Broadband Competition by Speed of Service

At Least 3 Mbps Downstream  
and 768 Kbps Upstream



At Least 10 Mbps Downstream  
and 1 Mbps Upstream



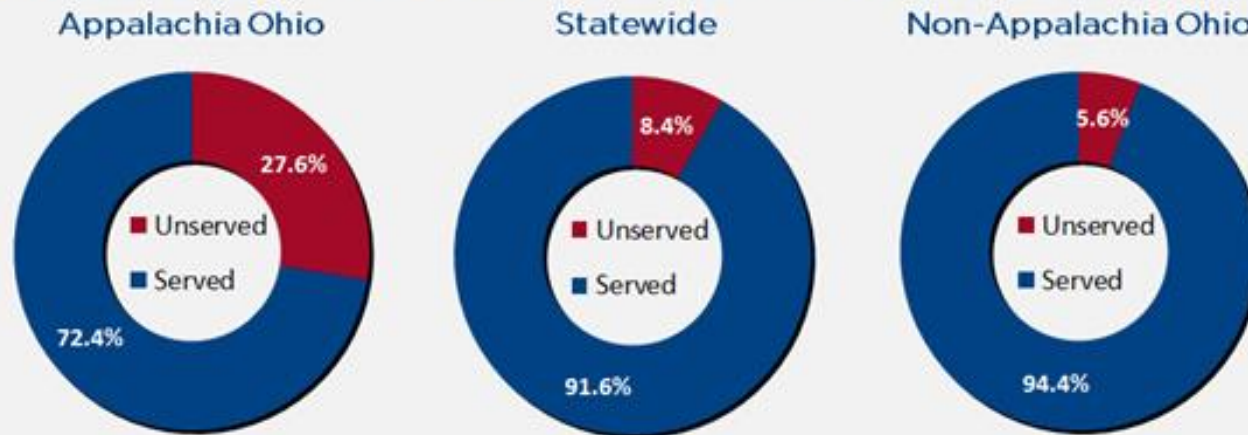
At Least 25 Mbps Downstream  
and 3 Mbps Upstream



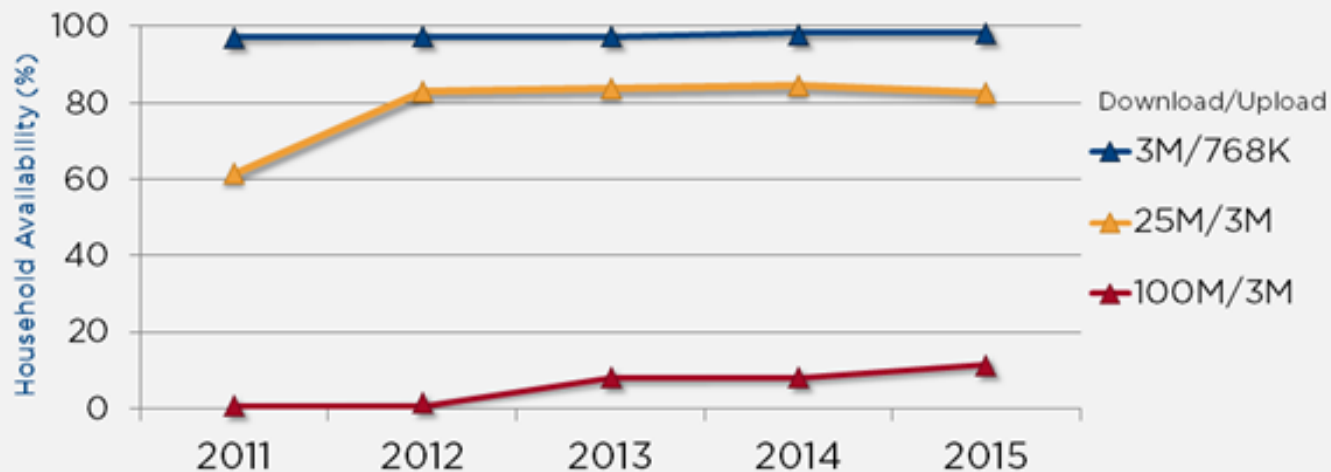
Number of Facilities-Based Broadband Providers	Households Served 3 Mbps/768 Kbps	Households Served 10 Mbps/1 Mbps	Households Served 25 Mbps/3 Mbps
4+ Providers	858,003	278,033	87
3 Providers	1,228,032	641,242	38,300
2 Providers	1,945,131	1,849,749	1,106,835
1 Provider	489,160	1,448,542	2,672,017
Unserved	83,109	385,869	786,196

# Ohio's Broadband Landscape: Access

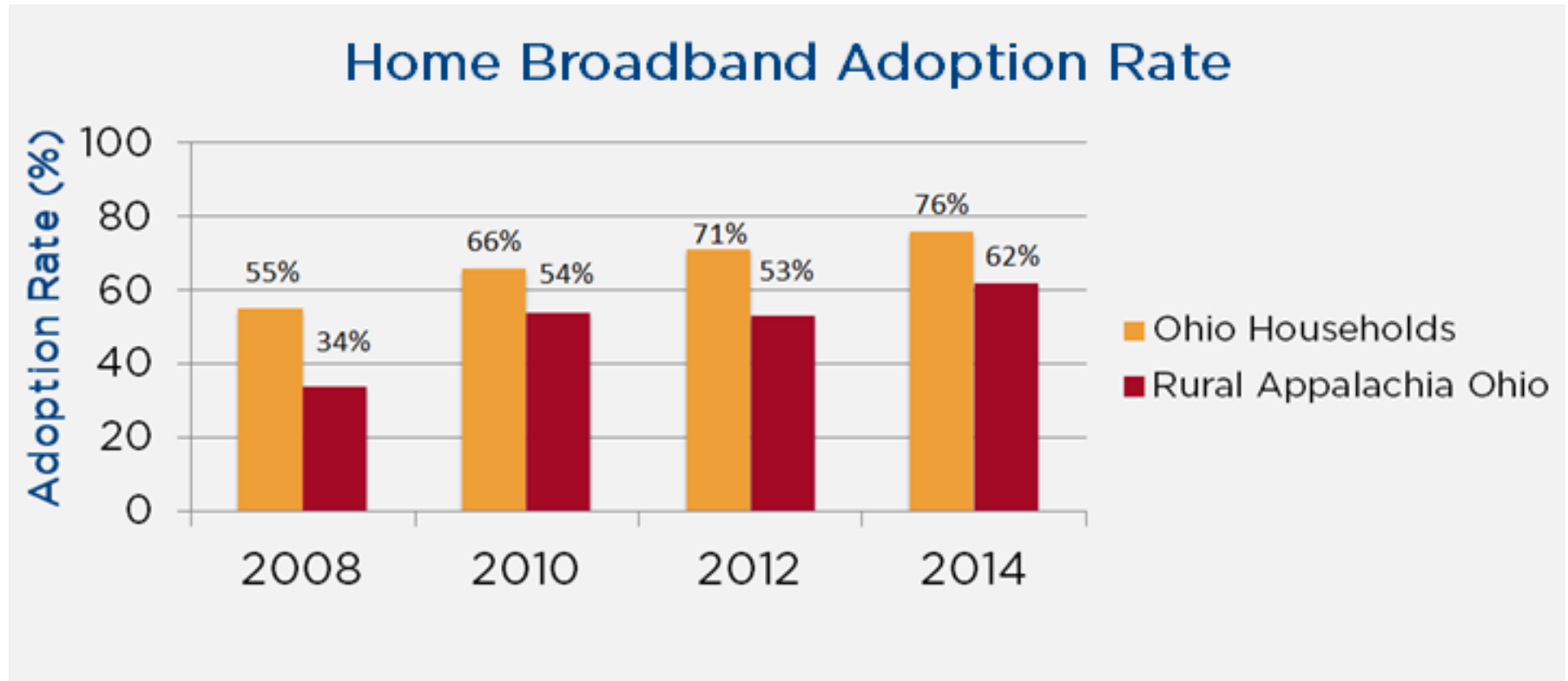
## Broadband Availability at 10 Mbps Download/1 Mbps Upload



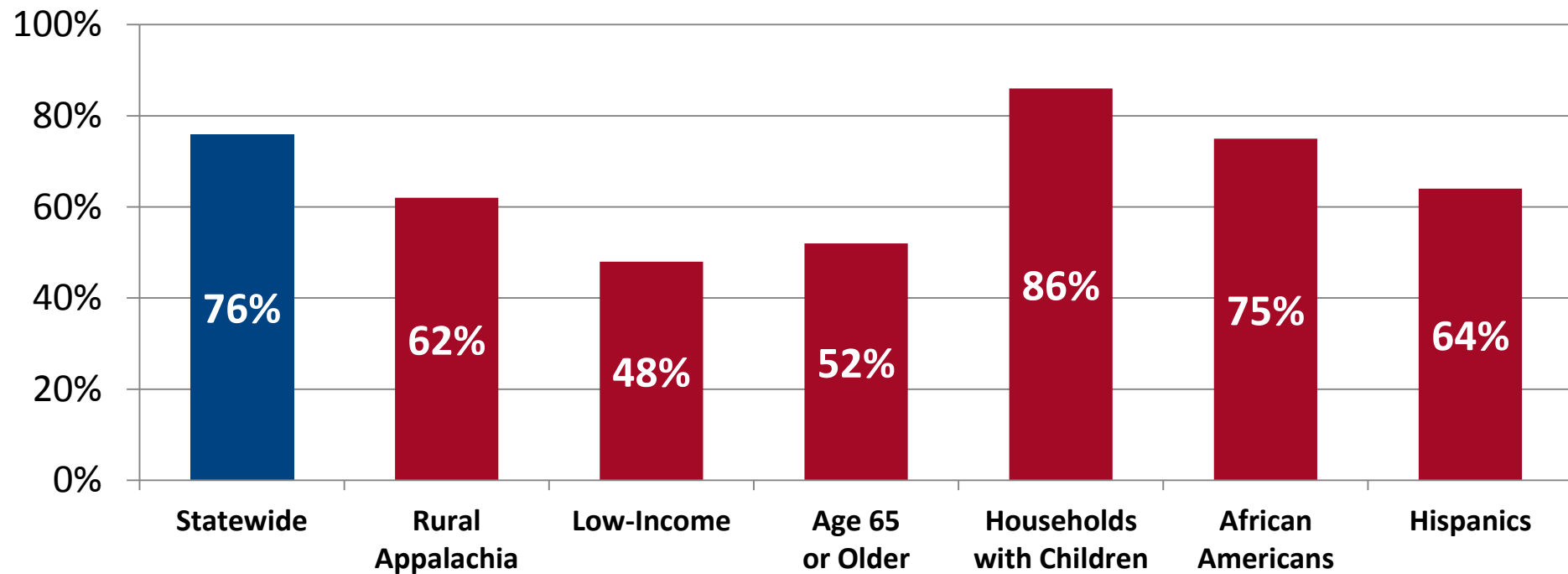
## Trends in Residential Broadband Availability by Speed



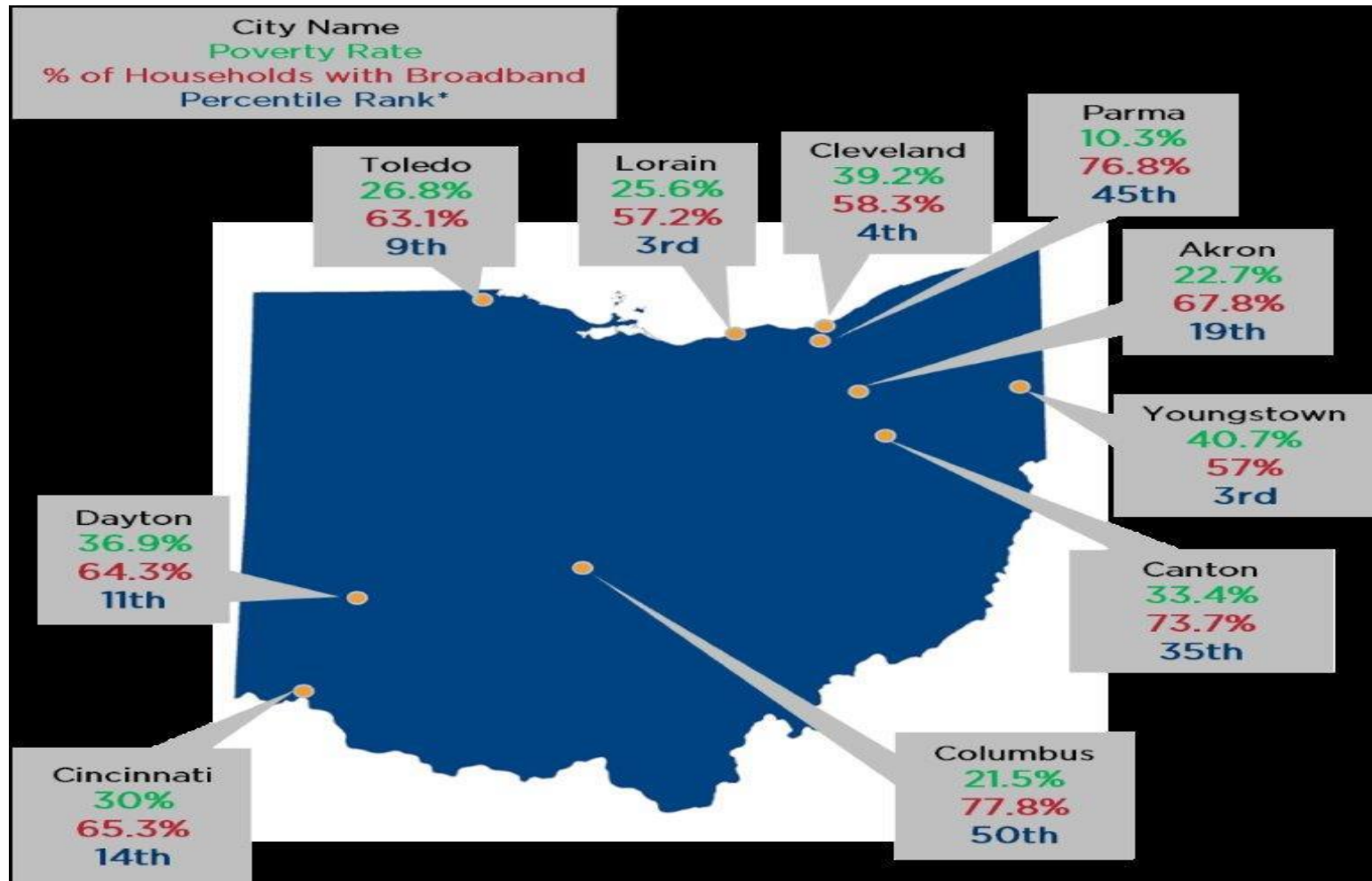
# Ohio's Broadband Landscape: Adoption



# Home Broadband Adoption Rates

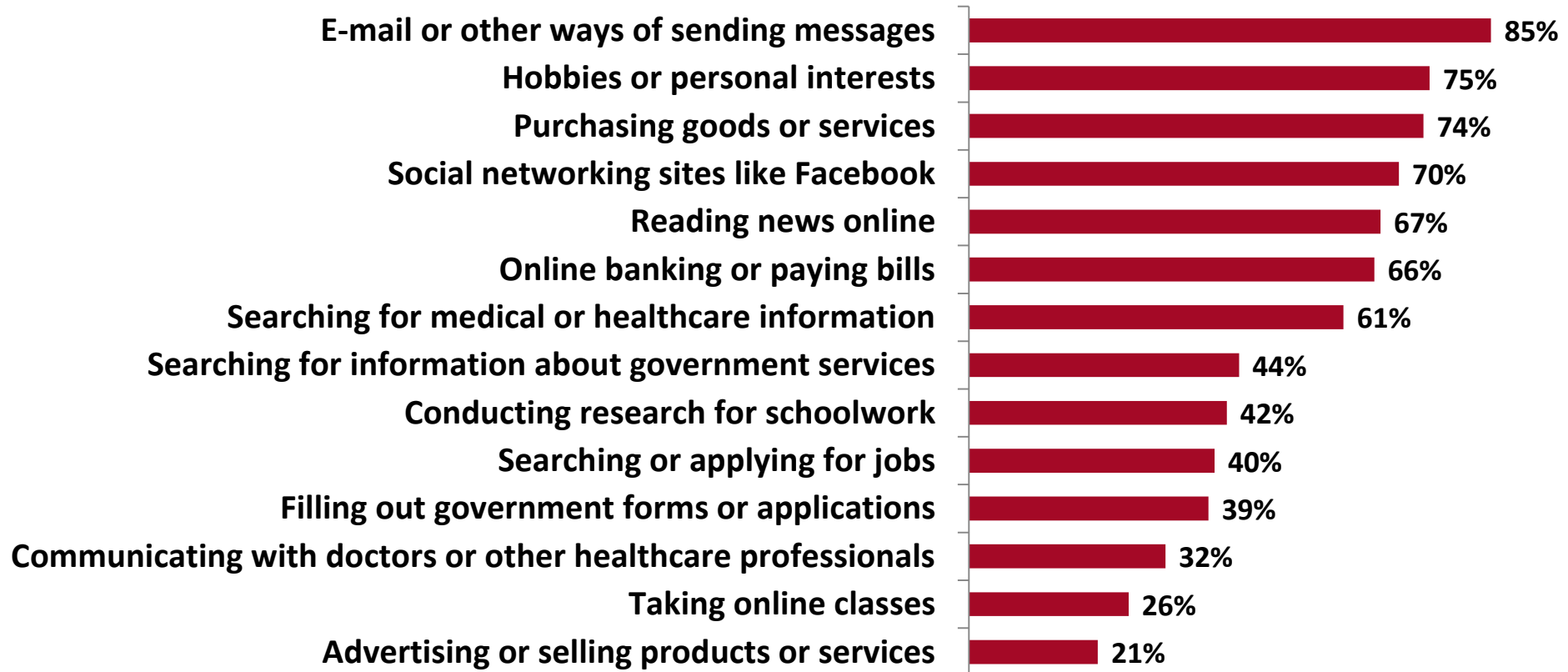


# Ohio's Broadband Landscape: Adoption in Urban Areas



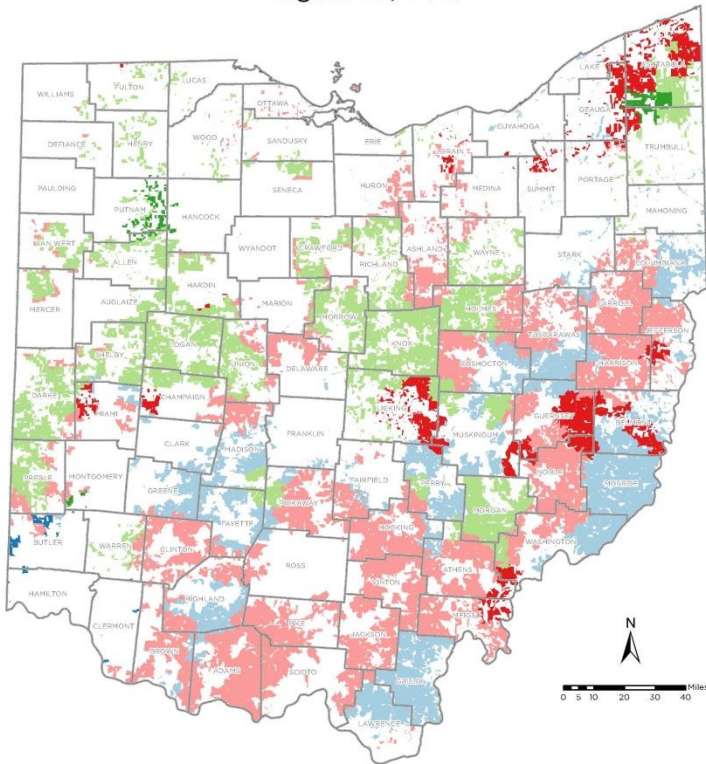
\*Percentiles are measured against the 591 urban areas in the United States and Puerto Rico with populations of 50,000 or more. For example, a city in the 10th percentile has a broadband adoption rate lower than 90% of those 591 cities.

# How Ohio Adults Use the Internet



# Efforts to Solve Digital Disparities

Connect America Fund Phase II Build-Out Commitments  
August 27, 2015



Provider	Annual Subsidy Offered (2015-2020)	Locations in Eligible Areas
AT&T	\$14.8 million	37,603
Cincinnati Bell	\$194,944	745
CenturyLink	\$16 million	47,707
FairPoint	\$420,997	1,247
Frontier	\$22.9 million	66,592
Windstream	\$4.15 million	13,073
<b>Total:</b>	<b>\$58.38 million</b>	<b>166,967</b>

Carrier	Housing and Business Locations in Targeted Areas	Annual Subsidy
AT&T	37,603	\$14,802,500
Cincinnati Bell	745	\$194,944
CenturyLink	47,707	\$15,982,805
FairPoint	1,247	\$420,997
Frontier	66,592	\$22,927,850
Windstream	13,073	\$4,154,270

## Legend

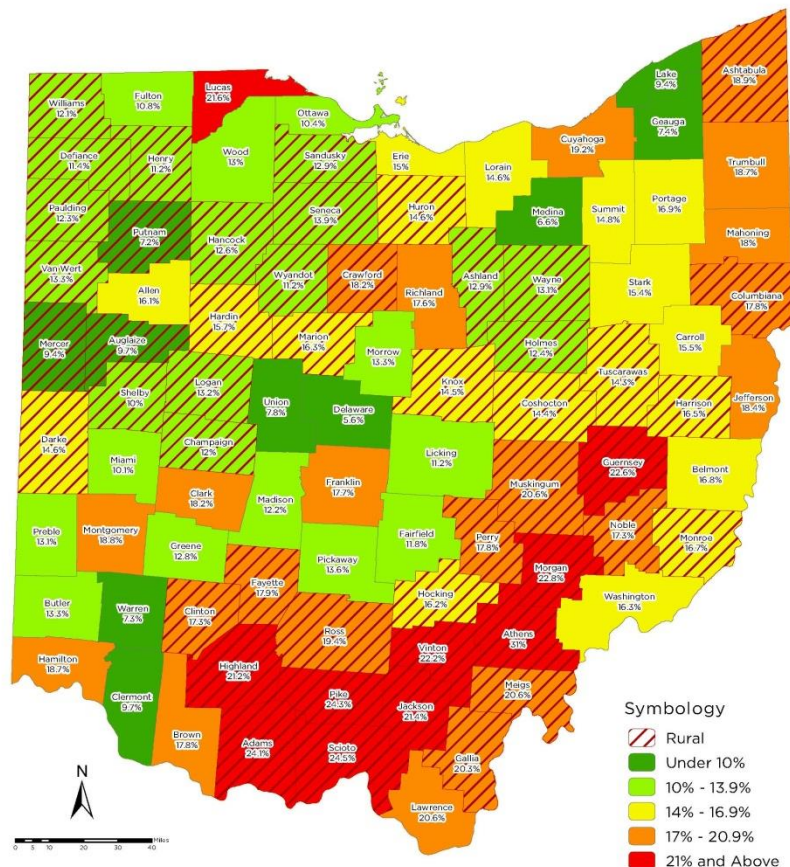
- County Boundary
- AT&T Areas Targeted for Subsidy
- Cincinnati Bell Areas Targeted for Subsidy
- CenturyLink Areas Targeted for Subsidy
- FairPoint Areas Targeted for Subsidy
- Frontier Areas Targeted for Subsidy
- Windstream Areas Targeted for Subsidy



# Efforts to Solve Digital Disparities

# Poverty in the State of Ohio

## Percentage of Population Living Under Poverty Level



To qualify for the [FCC's Lifeline Program](#), an individual must have an income that is at or below 135% of the federal poverty guidelines, or participate in at least one of the assistance programs listed on the site, including Medicaid, SNAP benefits, SSI, LIHEAP, and others.

Published August 5, 2015

Source: U.S. Census Bureau,  
Small Area Income and Poverty Estimates.

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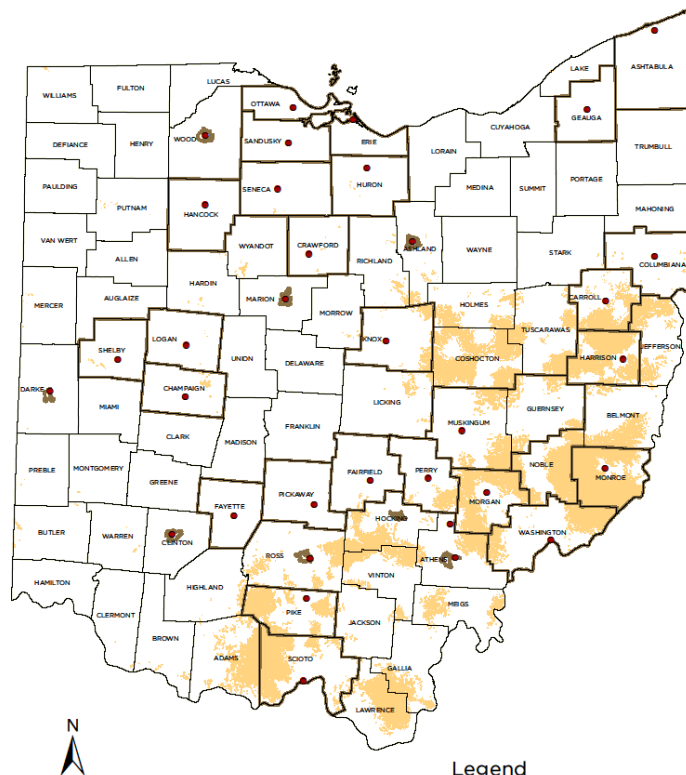
**ConnectHome:** Public-private initiative with Department of Housing and Urban Development (HUD), EveryoneOn, and US Ignite to provide low-cost broadband, technical training, digital skills, and devices to residents in assisted housing units.

**Lifeline Reform:** the Federal Communications Commission recently voted to add broadband coverage to the government's Lifeline phone subsidy program for low-income families.

# Efforts to Solve Digital Disparities

## Rural Transit Systems Unserved by Broadband

Unserved by Fixed Wireless or Mobile Broadband with Advertised Speeds of at Least 10 Mbps Downstream and 1.5 Mbps Upstream



Updated May 15, 2015



### Legend

- Rural Transit Address
- Rural Transit Service Area
- Unserved Area\*

\*This does not include satellite or fixed broadband services, which may be available.

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## Transit Tech Ohio

Ohio DOT and Connect Ohio Tiger Grant

Provide technical assistance to improve rural broadband capacity in 49 counties

Community Engagement and Wireless Broadband

Leverage CAF infrastructure investment to benefit rural transit and economic opportunity

# The Future of Connect Ohio

- Dedicated broadband outreach and technical assistance office in Columbus is closed.
- Ohio broadband availability maps, analyses, and validation techniques, as well as broadband adoption research will no longer be updated.
- Inquiries into broadband service coverage across the state will no longer be conducted.
- All broadband service coverage validations are terminated.
- Connect Ohio's quarterly federal policy briefings are eliminated.

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# What is an Intelligent Ohio?

# Intelligent Ohio & Success

1. What is an “Intelligent Ohio”?
2. What does success look like?

Break up into three groups

- Assign a scribe
- Assign a spokesperson
- Report back to the group at 11:30 a.m.



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# Lunch Break

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# The way forward!

# Next Steps & Actions

1. What are the next steps that need to be taken?
2. How do we continue to move forward to become an Intelligent Ohio?

Break up into three groups

- Assign a scribe
- Assign a spokesperson
- Report back to the group at 2:10 p.m.



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# Break

# Four Focus Areas

## 1. **Assess & Evaluate**

Metrics towards 6 indicators

## 2. **Energize & Educate**

City by City/Community Accelerator

## 3. **Research & Development**

Needs

## 4. **Leverage Affiliations**

Statewide/Associations/Global



# Thank you!

Notes, Follow Up & Next Steps to  
come...

